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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/xx (6-95)
OMB 0651-0032

0002/PTO
Rev. 6/95

U.S. Department of Commerce
Patent and Trademark Office

NEW UTILITY PATENT APPLICATION TRANSMITTAL

(to be used for new applications only)

Attorney Docket Number	100-86
First Named Inventor	Sadar
Total Pages in this Submission	51

22389 U.S. PTO
10/6994152



APPLICATION ELEMENTS

Notice: Checklist items mentioned under Application Elements section construct a new utility patent application. Please refer to MPEP Sections 506, 601, (37CFR 1.77, 1.53, 35 USC 111, 112, 113) for detailed explanation regarding completeness of an original patent application.

1. ☒ Fee Transmittal Form (prescribed filing fee(s))
2. Specification
 - ☒ Abstract of the Disclosure
 - ☒ Title of the Invention
 - ☐ Cross References to Related Applications (if applicable)
 - ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)
 - ☐ Reference to Microfiche Appendix (if applicable)
 - ☒ Background of the Invention
 - ☒ Brief Summary of the Invention
 - ☒ Brief Description of the Drawings (if drawings filed)
 - ☒ Detailed Description
 - ☒ Claim or Claims
3. ☒ Drawing(s) (when necessary as proscribed by 35 USC 113)
4. ☒ Executed Declaration
5. Genetic Sequence Submission (if applicable, all must be included)
 - ☐ Paper Copy
 - ☐ Computer Readable Copy
 - ☐ Statement Verifying Identical Paper and Computer Readable Copy

ACCOMPANYING APPLICATION PARTS

6. ☒ Assignment Papers
7. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
8. ☐ Computer Program in Microfiche
9. ☐ English Translation Document (if applicable)
10. ☐ Information Disclosure Statement/PTO-1449 ☐ Copies of IDS Citations
11. ☐ Petition Checklist and Accompanying Petition
12. ☐ Preliminary Amendment
13. ☐ Proprietary Information
14. ☒ Return Receipt Postcard
15. ☐ Small Entity Statement
16. ☐ Additional Enclosures (please identify below):

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Dean P. Edmundson
Signature	<i>Dean P. Edmundson</i>
Date	October 27, 2003

FOR OFFICIAL USE ONLY

Application Number		Class		Independent Claims	
Date of Receipt	Application Type	GAU		Total Claims	
	Filing Date	Foreign Filing License?		Drawing Sheets	
	Small Entity	Foreign Address?		Special Handling?	

Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231, and to the Office of Information and Regulatory Affairs, Office of Management and Budget (Project 0651-0032), Washington DC 20503. DO NOT SEND FEES OR

18304

US PTO

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Patent and Trademark Office

FEE TRANSMITTAL

TOTAL AMOUNT OF PAYMENT (\$) 810

Complete if Known

Application Number	
Filing Date	
First Named Inventor	Sadar
Group Art Unit	
Examiner Name	
Attorney Docket Number	100-86

METHOD OF PAYMENT (check one)

1 ☐ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:Deposit
Account
NumberDeposit
Account
Name
☐ Charge Any Additional
Fee Required Under 37
CFR 1.16 and 1.17
 ☐ Charge the Issue Fee Set in 37
CFR 1.10 at the Mailing of the
Notice of Allowance, 37 CFR
1.311(b)
2 ☒ Payment
Enclosed:☒ Check☐ Money Order☐ Other

(reserved space)

FEE CALCULATION (fees effective 1/1/96)

1 FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	700	201	350	Utility filing	770
106	300	206	150	Design filing fee	
107	540	207	270	Plant filing fee	
100	700	200	350	Reissue filing fee	

SUBTOTAL (1) (\$) 770

3 ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge-late filing fee or oath	
109	130	139	130	Non-English specification	
147	2,390	147	2,390	For filing a request for reexamination	
112	870	112	870	Requesting publication of SIR prior to Examiner action	
113	1,740	113	1,740	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for response within first month	
116	300	216	190	Extension for response within second month	
117	900	217	450	Extension for response within third month	
118	1,400	218	700	Extension for response within fourth month	
119	290	219	145	Notice of Appeal	
120	290	220	145	Filing a brief in support of an appeal	
121	250	221	125	Request for oral hearing	
130	1,430	130	1,430	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive unavoidably abandoned application	
141	1,250	241	625	Petition to revive unintentionally abandoned application	
142	1,200	242	640	Utility issue fee (or reissue)	
143	420	243	210	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
126	220	126	220	Submission of Information Disclosure Stmt	
501	40	501	40	Recording each patent assignment per property (x no. properties)	40
7	220	7	220	Protest after application published	
7	1500	7	1500	Late Claim for priority during pendency	
114	150	214	75	Provisional Application filing	

Other fee (specify) _____

Other fee (specify) _____

SUBTOTAL (3) (\$) 40

2 CLAIMS

Total Claims 14 - 20 = 0 ^{Extra} X 0 = 0

Independent Claims 3 - 3 = 0 ^{Extra} X 0 = 0

Multiple Dependent Claims no = 0

Large Entity - Small Entity

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
102	70	202	35	Independent claims in excess of 3
103	22	203	11	Claims in excess of 20
104	250	204	125	Multiple dependent claim
109	70	209	35	Reissue independent claims over original patent
110	22	210	11	Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0

SUBMITTED BY

Typed or
Printed Name

Dean P. Edmundson

Signature

Dean P. Edmundson

Date

10/27/03

Complete (if applicable)

Reg. Number

25723

Deposit Account
User ID

Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231, and to the Office of Information and Regulatory Affairs, Office of Management and Budget (Project 0651-0032), Washington DC 20503. DO NOT SEND FEES OR

The PTO did not receive listed item(s). We receive a check for \$846.00 not for \$810.00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Michael J. Sadar
Serial No: (Atty. docket 100-86) Group No.:
Filed: On or about 10/27/03 Examiner:
For: DETECTION OF FILTER BREAKTHROUGH
Commissioner of Patents and Trademarks
Washington, D.C. 20231

EXPRESS MAIL CERTIFICATE

"Express Mail" label number EU875725756US

Date of Deposit October 27, 2003

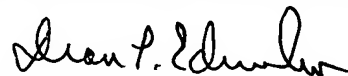
I hereby certify that the following *attached* paper or fee

Above-identified application for patent
Declaration and Power of Attorney
9 sheets of drawings
Assignment to Hach Company
Transmittal letter
Filign & recording fees

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Dean P. Edmundson

(Typed or printed name of person mailing paper or fee)



(Signature of person mailing paper or fee)

NOTE: Each paper must have its own certificate and the "Express Mail" label number as a part thereof or attached thereto. When, as here, the certification is presented on a separate sheet, that sheet must (1) be signed and (2) fully identify and be securely attached to the paper or fee it accompanies. Identification should include the serial number and filing date of the application as well as the type of paper being filed, e.g. complete application, specification and drawings, responses to rejection or refusal, notice of appeal, etc. If the serial number of the application is not known, the identification should include at least the name of the inventor(s) and the title of the invention.

NOTE: The label number need not be placed on each page. It should, however, be placed on the first page of each separate document, such as, a new application, amendment, assignment, and transmittal letter for a fee, along with the certificate of mailing by "Express Mail." Although the label number may be on checks, such a practice is not required. In order not to deface formal drawings it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a set of informal drawings on which the label number is placed.